

STATE OF COLORADO

COLORADO DEPARTMENT OF HEALTH

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Denver, Colorado 80220
Phone (303) 320-8333

R.F.A.O.

1989 APR 26 A 7:50



April 24, 1989

Rocky Flats Area Office
U.S. Department of Energy
P.O. Box 928
Golden, CO 80402

REFER TO	
<input checked="" type="checkbox"/>	Area Mgr.
<input checked="" type="checkbox"/>	Dep. Area Mgr. <u>RIF</u> 4/27
<input checked="" type="checkbox"/>	Counsel
<input type="checkbox"/>	Ch. Admin. Br.
<input type="checkbox"/>	Ch. FM Br.
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<input type="checkbox"/>	Ch. SE&P Br.
<input type="checkbox"/>	Ch. S&S Br.
<input type="checkbox"/>	Proj. Mgr. PRMP
<input type="checkbox"/>	Duane Gattell

Roy Romer
Governor
Thomas M. Vernon, MD
Executive Director

Attn: Mr. Albert Whiteman, DOE Area Manager
Mr. Dominick J. Sanchini, President and General Manager
Rockwell International

Dear Messrs. Whiteman and Sanchini:

In a January 13, 1989 meeting with the Colorado Department of Health Hazardous Materials and Waste Management Division ("the Division"), the Rocky Flats Plant (RFP) proposed a risk assessment approach to the closure of the Solar Evaporation Ponds. This initial proposal was followed by a February 1, 1989 letter from RFP containing the outline for the risk assessment approach for contaminants of concern in the soils around the Solar Ponds. The Division has reviewed the risk assessment submittal, and finds the proposal to be conditionally acceptable. The conditions and several modifications to the risk assessment approach are listed below.

- 1) The risk assessment approach to closure, if selected, must comply with all applicable portions of Section 265 of the Colorado Hazardous Waste Regulations. Closure schedules and deadlines, as submitted in the Solar Evaporation Ponds closure plan revision No. 2, dated July 1, 1988, will continue to remain in effect.
- 2) The risk assessment approach proposes to evaluate both the cumulative target clean-up levels for various exposure pathways of specific chemicals of concern and the cumulative effect of contaminant mixtures. The proposed risk assessment also indicates that "there generally exists a single or a very few contaminant(s) which due to their intrinsic toxicity, drive the risk level and the consequent remediation." Clean-up and removal of soils may not be solely based on these individual contaminants. The approach which drives the risk level and the consequent corrective actions must be governed by the cumulative and potential synergistic effects of all contaminants within the unit.

ADMIN RECORD

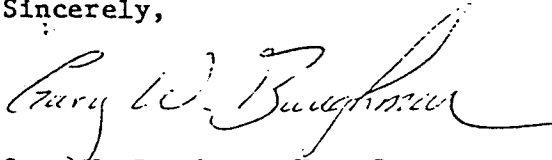
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- 3) Risk assessment-based clean closure under RCRA requires much more rigorous standards than a CERCLA risk assessment usually involves. According to the Federal Register, Volume 52, No. 53, dated March 9, 1987, wastes, waste residues, contaminated liners and soils (including contaminated ground water) must be removed or decontaminated in order to avoid the landfill closure and post-closure care requirements under the Part 265 regulations. Removal and decontamination is defined as the removal of all materials including ground water which pose a substantial present or potential threat to human health or the environment. In order to meet the requirements for a RCRA risk assessment-based clean closure, the following issues must be addressed:
- a) No contaminants may remain which may harm human health now or in the future since no post-closure care or monitoring is required for clean closed facilities.
 - b) The risk assessment must assume that direct human contact through dermal exposure, inhalation or ingestion will not result in a threat to human health and the environment.
 - c) The risk assessment must assume a point of exposure to hazardous wastes within the unit boundary for all potential routes of exposure, including ground-water ingestion. No attenuation of any hazardous waste constituent can be assumed to occur before the constituents reach the exposure point.
 - d) The risk-assessment approach may not be based on exposure control measures such as fencing, because future use of the property cannot be reliably controlled.
 - e) If Division-recommended exposure limits for a hazardous constituent do not exist, then RFP must remove the constituent to background levels, submit data of sufficient quality for the Division to determine the environmental and health effects of the constituent, or follow landfill closure and post-closure requirements.
- 4) If agreement cannot be reached on risk assessment-based clean-up standards, including the level for plutonium in soil, the Division may disallow the risk assessment approach and require closure in place according to the July 1, 1988 Solar Evaporation Pond closure plan.

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Risk Assessment
Page Three

If you have questions regarding these or any other matters, please contact George Dancik at (303) 331-4842.

Sincerely,

A handwritten signature in cursive script, reading "Gary W. Baughman". The signature is written in dark ink and is positioned above the typed name and title.

Gary W. Baughman, Unit Leader
Hazardous Facilities Unit
Hazardous Materials and
Waste Management Division

cc: Martin Hestmark, EPA
Nat. Miullo, EPA
Jefferson County Health Dept.
Boulder County Health Dept.

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